

IN THE CLAIMS

The text of all claims under examination is submitted, and the status of each is identified. This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (currently amended): A process of dewatering an aqueous suspension of sewage sludge comprising

a) treating the suspension with a dewatering amount of a reverse phase polymer, which is a dispersion of polymer particles in oil,

in which the reverse phase polymer only partially inverts releasing sufficient polymer to bring about flocculation and thickening of the suspension, involving the release of free water to produce a thickened suspension, wherein the release of free water is achieved by free drainage or filtration,

b) the remainder of the polymer is released from the reverse phase polymer as the reverse phase polymer fully inverts in the thickened suspension,

c) the release polymer released in step b) is mixed using conventional mixing equipment into and distributed throughout the thickened suspension

and

d) the thickened suspension is subjected to mechanical compression dewatering to form a cake,

wherein the reverse phase polymer has an IV of at least 3 dL/g and which polymer is cationic and formed from one or more ethylenically unsaturated cationic monomers optionally with one or more nonionic monomers and the cationic monomers are selected from the group consisting of dialkylamino alkyl (meth)acrylates, dialkylamino alkyl (meth) acrylamides acid addition or quaternary ammonium salts thereof and diallyl dimethyl ammonium chloride and the nonionic monomer is selected from the group consisting of acrylamide, methacrylamide, hydroxyethyl acrylate and N-vinylpyrrolidone.

2. (original): A process according to claim 1 in which the reverse phase polymer is the sole chemical dewatering treatment aid.

3. (cancelled).

4. (previously presented): A process according to claim 1 in which the mechanical dewatering employs an apparatus selected from the group consisting of belt press, filter press, screw press and centrifuge.

5. (previously presented): A process according to claim 1 in which the reverse phase polymer is a water in oil emulsion or a substantially dehydrated polymer in oil dispersion.

6. (cancelled).

7. (previously presented): A process according to claim 1 in which the polymer is formed from at least 30 % by weight cationic monomer or monomers.

8-9. (cancelled).

10. (previously presented): A process according to claim 1 in which the polymer is selected from the group consisting of,

i) a polymer formed from 50 to 100% by weight methyl chloride quaternary ammonium salt of dimethyl amino ethyl (meth) acrylate and 0 to 20% by weight acrylamide of intrinsic viscosity between 4 and 10 dl/g,

and

iv) poly dimethyl diallyl ammonium chloride.

11. (cancelled).

12. (previously presented): The process according to claim 1, wherein the reverse phase polymer is a cationic polyacrylamide.